Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of	)	
	)	
IP-Enabled Services	)	WC Docket No. 04-36
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COMMENTS OF COMMUNICATION SERVICE FOR THE DEAF, INC.

Communication Service for the Deaf, Inc.
102 North Krohn Place
Sioux Falls, SD 57103
605-367-5760 (V)
605-367-5761 (TTY)

By: Karen Peltz Strauss
KPS Consulting
2120 L Street, N.W.
Suite 400
Washington, D.C. 20037
kpsconsulting@starpower.net

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SUMMARY

Video relay services and Internet Protocol relay are two forms of IP-enabled services that have already begun to significantly improve the lives of deaf, hard of hearing, and speech disabled individuals. These services need to remain viable – both in terms of their financial support and in terms of their ability to provide functionally equivalent services – as the FCC moves forward in its efforts to successfully deploy IP-enabled services to the American public.

In the past, market forces have been insufficient to safeguard the needs of people with disabilities to telecommunications access. The response has been a string of federal legislation, as well as various FCC actions, that have been intended to ensure that people with disabilities are not left behind each time our nation surges ahead in the development and enjoyment of new and innovative technologies. The FCC has both the authority and the obligation – as contained the doctrines of universal service and ancillary jurisdiction – to continue these efforts to ensure disability access to IP-enabled services. People with disabilities should not lose the access that they have acquired over the past several decades simply because our nation is migrating to more advanced technologies that have far better capabilities than traditional telephony.

In determining the appropriate regulatory framework for IP-enabled services, the Commission should carefully consider the effect that this framework will have on people with disabilities. As the ability to distinguish between computers and telephone functions slowly disappears, the Commission should impose access mandates where new IP-enabled technologies take the place of or substitute for traditional telephony, regardless of the transmission path or format that those particular services use. In other words, the

regulatory classification of IP-enabled services should turn on its functionalities, not on the nature of its underlying transmissions or the technologies used to send those transmissions.

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I. Introduction

Communication Service for the Deaf (CSD) submits these comments in response to the Federal Communications Commission's (FCC's) Notice of Proposed Rulemaking (NPRM) on IP-Enabled Services[1] CSD is a private, non-profit organization that provides programs and services intended to increase communication, independence, productivity, and self-sufficiency for all individuals who are deaf and hard of hearing. CSD provides direct assistance to individuals through education, counseling, training, communication assistance, and telecommunications relay services. At present, CSD provides relay services as a subcontractor to Sprint or owns and maintains TRS operations-calls centers in over thirty states. In addition, CSD provides video relay services as a subcontractor to Sprint throughout the entire United States and its territories.

As an organization that works to expand communications access by people with hearing disabilities, CSD is particularly concerned with the impact that Voice over the Internet (VoIP) and other IP-enabled services will have on deaf and hard of hearing individuals. CSD agrees with the Commission that IP-enabled services have the potential

[1] *In the Matter of IP-Enabled Services,* Notice of Proposed Rulemaking, WC Docket No. 04-36, FCC 04-28 (rel. March 10, 2004) (IP-Enabled NPRM)

to significantly enhance the lives of people with disabilities by offering all individuals, including people with disabilities, the opportunity to customize their communications options to meet their needs. Because IP-enabled services are based on software and digital transmissions, these services also offer the potential to provide new and innovative ways to improve communication access. For example, IP-enabled services can offer clearer transmissions for people who are hard of hearing, improved video communications for people whose primary mode of communication is sign language, and the simultaneous transmission of information to consumers in text, audio and video for people with cognitive or multiple disabilities.

II. There are Many Present Applications of IP-Enabled Services that Specifically Facilitate Communications Services by People with Disabilities

IP-enabled communication technologies already have begun to change the lives of deaf and hard of hearing Americans. Through video relay services and Internet relay – both of which are accessed through the Internet – deaf and hard of hearing individuals are able to engage in communications previously not possible.

A. Video Relay Services.

When the FCC first implemented the mandate to provide nationwide relay services under Title IV of the Americans with Disabilities Act, only text-to-voice services, accessible through TTY and conventional phones over the public switched telephone network (PSTN), were available. With this service, TTY and hearing individuals conversed with one another through an operator called a communications assistant, who spoke everything that the TTY user typed and typed responses back from the hearing person. The process was slow and cumbersome, and because it used a half

duplex mode, it required each user to wait through painfully long pauses before receiving a response from the other party.

In March of 2000, the Commission approved a new relay service, video relay service, that utilizes video links and sign language interpreters to enable native sign language users to communicate with voice telephone users.[2] The sign language user typically accesses video relay services through a high speed Internet service that connects the user to a remote video interpreter. The interpreter then uses the video link to see the caller and interpret between that caller and the voice party.

Video relay services have afforded people with hearing disabilities whose native language is American Sign Language (ASL) the opportunity to benefit from the extraordinary advantages that IP-enabled technologies have to offer. In fact, VRS is the *only* communication service that enables these individuals to communicate by telephone with other people in a manner that is functionally equivalent to the ability of individuals who do not have hearing disabilities, as required by Title IV of the Americans with Disabilities Act.[3] VRS allows ASL and hearing individuals to have naturally-flowing, real time conversations with one another that mirror the speed of voice-to-voice conversations. Through these services, ASL users and hearing persons can fully appreciate the emotional content and conversational nuances that parties can typically convey during conventional voice-to-voice phone conversations. VRS also has enabled individuals previously unable to use traditional text relay to communicate by phone. Deaf children, senior citizens, immigrants, and others who cannot type or are not

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[2] *In the Matter of Telecommunications Services and Speech-to-Speech Services for Individuals with Disabilities*, Report and Order and Further Notice of Proposed Rulemaking, CC Dkt 90-571, FCC 00-56 (adopted February 17, 2000, released March 5, 2000) (Improved TRS Order).

[3] Title IV of the ADA is codified at 47 U.S.C. §225.

sufficiently familiar with written English can now call friends and relatives. And the ability to more effectively use the telephone to conduct job searches, make appointments for interviews, and perform new job duties involving phone communications – including communications that require conference calls – is dramatically improving employment opportunities for VRS users.

Unfortunately, recent decisions by the FCC have put VRS in jeopardy. Specifically, in June of 2003, the FCC's Consumer and Governmental Affairs Bureau severely reduced the allowable compensation rate for VRS providers. More recently, under the FCC's direction, the National Exchange Carriers Association proposed dropping this rate even further. As the Wireline Competition Bureau moves forward with its IP-enabled rulemaking, CSD urges it to coordinate with actions taken elsewhere within the Commission, to ensure the continued viability of these critically important IP-enabled services.

C. Internet Protocol Relay Services.

Internet Protocol relay services, approved by the FCC in April of 2002, also provide significant benefits to deaf, hard of hearing, and speech disabled individuals. These services allow individuals to access relay services through an Internet link, rather than with their TTYs. A communication assistant who responds to Internet Protocol relay calls completes those calls to third parties over the public switched network.[4] The advantages of Internet Protocol relay is that it allows callers to make several calls simultaneously, conduct conference calls, browse websites during calls, and enjoy

[4] Although at present, the second leg of these calls typically travels over the PSTN, there is no reason why such calls could not travel over the Internet as well – via VoIP – to reach their destination.

extraordinary portability by being able to initiate calls from any computer, personal digital assistant (PDA), Web-capable telephone, or other Internet-enabled device.

III. The FCC's Regulatory Framework for IP-Enabled Services Should be Determined by the Functionality of the IP Service at Issue.

The Commission seeks comment on possible categories that can be used for determining where it should and should not impose regulatory controls over IP-enabled services.[5] CSD proposes that the Commission rely on two of the categories proposed in the Commission's NPRM for purposes of establishing mandates to ensure disability access: (1) the extent to which an IP-enabled service is functionally equivalent to traditional telephony and (2) the extent to which a particular service can provide a substitute for traditional telephony. IP-enabled services that fall into either of these categories focus on services that perform the same functions as traditional telephony. Using this approach, if a particular IP service provides the same or equivalent functions as that offered via conventional telephone services, that IP service would be subject to the same or similar accessibility mandates that now cover telecommunications services under Section 255 of the Communications Act. Although CSD believes that this test is the one that the FCC should adopt, it cautions the Commission not to limit what it considers to be a substitute for traditional telephony to mere voice telephone services. For years, the deaf community has relied on text for its telephone communications. Now the community, especially those individuals who use sign language, are finding that video communications can effectively meet their telephonic needs. It is critical for the Commission to recognize that the use of text and video, or a combination of these two

[5] NPRM at ¶¶35-37.

modes, can provide substitutes for traditional telephony as it determines what telephone-like IP-enabled services to bring under the umbrella of its disability access protections.

The FCC proposes a number of other categories as possible bases for determining its regulatory treatment of IP-enabled services. For the most part, these other categories consider the extent to which an IP service interconnects with the PSTN, the extent to which it uses a particular transmission method, platform or communications protocol, the extent to which certain applications are used by the end user to issue and receive information, and the extent to which particular services use the Internet, primary lines, telephones, or computers. CSD believes that these categories, by focusing on the type of carriage being used to convey the communication, rather than the function of the service itself, are inappropriate for determining disability access safeguards. For consumers, whether a particular call travels over the PSTN or the Internet, or whether that call is provided by a common carrier, a cable provider or a satellite service, is meaningless. All that matters to the consumer is that he or she be able to make the communication happen in a manner that is fully accessible.

The FCC's ruling on the authorization of Internet Protocol relay services can provide useful guidance to the Commission as it develops its policies for safeguarding disability access to IP-enabled services. Indeed, the Commission itself has recognized the importance of its Internet Protocol ruling; it specifically seeks comment on the application of this ruling to the Commission's current efforts to determine the appropriate regulatory treatment for IP-enabled services.[6]

When the FCC authorized Internet Protocol relay services, it focused not on the *form* that these particular telephone communications took, but rather the underlying

[6] NPRM at ¶59.

function of these services. Specifically, although the ADA defines telecommunications relay services as "*telephone* transmission services" that enable people with hearing or speech disabilities to communicate by wire or radio with individuals who do not have those disabilities,[7] in its Internet Relay Order, the Commission decided not to limit relay access to PSTN-driven telephone traffic. Instead, the Commission ruled that "telephone transmission services" could be interpreted to include "all transmissions using telephonic equipment or devices, whether over the public network, cable, satellite, or any other means, so long as the *requisite functionality* is provided." The Commission defined the requisite functionality as "two way communication between people with hearing or speech disabilities and people without those disabilities."

By focusing on the functionality, and not the form of the transmission method, the Commission's action furthered Congress's overall objective – as contained in the Americans with Disabilities Act – to expand the availability of functionally equivalent relay services. In the past, the Commission has perceived its role in promoting functionally equivalent services as one that continually challenges it to meet ever changing improvements in telecommunications technologies.[8] The Commission's forward thinking decision on Internet protocol relay services met this challenge by vastly improving the ease with which people with hearing and speech disabilities can access and use relay services.

The Commission notes that several software developers are in the process of improving their IP-enabled data services, including instant messaging, e-mail, and virtual private networks, to offer even newer features and capabilities that take advantage of

[7] 47 USC ¶225(a)(3).
[8] Improved TRS Order at ¶4.

higher network speeds.[9] The Commission further notes that these new services may integrate video, data, and voice capabilities that make it difficult or even impossible to distinguish voice from data services. As the convergence of various communications technologies and their underlying transmissions become a reality, consumers with disabilities will increasingly turn to these new and innovative services – as they have in the case of relay services – to replace their use of the PSTN for their basic and advanced telecommunications needs. In addition to the basic telephone-like services they provide, the various enhanced applications that these IP services will have – video conferencing, distance training, and telemedicine – will all have implications for people with disabilities to the same extent that they have implications for the general public. It will be just as important for people with disabilities to be able to access and respond to information provided over these IP-enabled services via their chosen communication mode – be it voice, text or video – as it will be for the general public. To this end, these new and enhanced services must not only be accessible, they must be interoperable. As consumers become increasingly reliant on multiple transmission methods for communications, mandates need to be in place to ensure that the providers offering these various transmission tools make their networks and equipment capable of interacting with the networks and equipment offered by other providers. This is necessary to ensure seamless communications access for all users.

Moreover, as the venues for telephone service shift from the public switched network of the past to IP-enabled capabilities of the future, people who are deaf and hard of hearing should not have to worry about whether they will lose access to communication to which they have only recently grown accustomed. Unlike the general

[9] NPRM at ¶16.

population, even access to the PSTN is relatively new for most deaf people. It was not until the 1980s that the manufacture of portable and reasonably priced TTYs made the purchase of these devices possible for deaf consumers. And it was not until the 1990s that the ADA's mandates for nationwide relay services made telephone communication between TTY users and other individuals a reality. Having finally secured the right to effectively communicate by telephone, these individuals should not have to worry that this right will be taken away from them as telephone-like communications migrate to the Internet.

IV. The FCC Needs to Set Up Cost Recovery Mechanisms that Ensure the Continued Viability of Telecommunications Relay Services.

The Commission seeks comment on the extent to which its rulings in this proceeding will affect contributions to the Interstate TRS Fund, and more specifically, how the Commission should amend its rules on this issue.[10] CSD agrees that the Commission should be concerned about sustaining this Fund in a communications market that is becoming increasingly reliant on IP-enabled services.

Section 225 of the Communications Act directs the Commission to promulgate regulations that generally require the interstate costs of providing TRS to be recovered from all subscribers of every interstate service, and the costs of providing intrastate TRS to be recovered from intrastate jurisdictions. Although the ADA distinguishes between inter and intrastate funding, it does not specify what type of interstate service needed to support the Interstate TRS Fund. At present, FCC rules require only common carriers that provide interstate services to contribute to the Interstate TRS Fund, a fund which now supports not only traditional interstate relay calls, but all video relay calls and relay

[10] NPRM at ¶60.

calls initiated over the Internet.[11] But the fact is that the FCC does not have to limit interstate relay contributions to only this population of subscribers. Rather, the Commission has sufficient discretion – and CSD now believes, the obligation – to expand the universe of interstate communication services that must support interstate relay services.

As IP-enabled services increasingly take the place of traditional telephone services, support for relay services will erode unless the companies that provide these Internet services are required to contribute proportionally to the TRS Fund. State relay funding is likely to confront a similar fate because like the FCC, most states only impose the obligation to support relay services on their common carriers.

CSD urges the Commission to serve as a model for the states by ensuring that all providers of IP-enabled services that replace or offer a substitute for traditional telephony, be required to support the Interstate TRS Fund. Because a telephone number-based methodology may soon become outmoded, CSD further urges that these providers be required to make contributions to the fund based on the number of their broadband connections.

V. Marketplace Competition will not Safeguard the Interests of People with Disabilities

In the IP-enabled world described by the Commission, there will be a wide array of IP-enabled services, at prices and with options that afford considerable choice and flexibility for consumers.[12] But the marketplace envisioned by the Commission is unlikely to become a reality for people with disabilities unless mandates are in place to require that these same services are accessible to these populations. In fact, it is highly

[11] 47 CFR 64.604(c)(5)(iii)(A).
[12] See e.g., NPRM at ¶¶5, 22, 36.

unlikely that market-driven forces will deliver the same "highly customized, low-cost suite of [IP-enabled] services" to people with disabilities that are delivered to the general public without FCC or legislative intervention.[13] The Commission appears to realize this fact. Although generally interested in a deregulatory approach to IP-enabled services, the Commission has made clear its strong interest in ensuring access by people with disabilities as our nation moves forward in the deployment of IP-enabled services.[14] Not only does the Commission request comment on how best to safeguard disability access in the instant proceeding, its commitment to meeting the needs of people with disabilities was also evidenced by its recent hosting of the "Solutions Summit on Disability Access Issues Associated with Internet-Protocol Based Communications Services." Held on May 7, 2004, this forum brought together stakeholders from all over the country to discuss disability issues related to IP-enabled services. Worth noting is that virtually all who testified at the Summit agreed on the need to devise a regulatory scheme that preserves disability access.

Time and again, history has revealed that market forces are insufficient to safeguard the interests of people with disabilities. Indeed, it is the very failure of the marketplace to protect these interests that has caused Congress to repeatedly enact legislation to ensure access to new and advanced technologies. The Telecommunications for the Disabled Act of 1982, authorizing the continued subsidization of specialized customer premises equipment,[15] the Hearing Aid Compatibility Act's mandate for hearing aid compatible telephones,[16] the ADA's requirement for relay services,[17] the

[13] See NPRM at ¶5.
[14] *Id.* at ¶¶5, 58-60.
[15] P.L. 97-410, codified at 47 U.S.C. §610.
[16] P.L. 100-394, codified at 47 U.S.C. §610.

Telecommunications Accessibility Enhancement Act's requirement for federal relay services,[18] Section 508 of the Rehabilitation Act's[19] mandates for access to federal telecommunications and information systems, and Section 255's mandates for accessible telecommunications products and services[20] were all responses by Congress to remedy the failure of the marketplace to safeguard the needs of people with disabilities.

The Commission, too, has responded to the failure of competitive market pressures to address the telecommunications needs of people with disabilities. For example, prior to the 1990s, deaf and hard of hearing individuals relied on analog services to meet their mobile telecommunications needs. For the most part, these services were both accessible to TTYs and compatible with hearing aids. But the introduction of digital wireless services brought dramatic changes. Unlike their analog predecessors, the new digital services were compatible with neither TTYs, hearing aids or cochlear implants. Efforts by consumers with hearing disabilities to convince the wireless industry to voluntarily make these services accessible to them were to no avail. It was only when the FCC intervened with regulatory mandates that the telecommunications industry began responding to these accessibility needs.

Another example of the Commission's efforts to remedy market failures for people with disabilities occurred in November of 2000, when the Commission deregulated Part 68's mandates regulating customer premises equipment connected to the PSTN. Among the very few provisions that survived this deregulatory effort were the

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[17] P.L. No. 101-336, codified at 47 U.S.C. §225.
[18] P.L. No. 100-542, codified at 40 U.S.C. §762..
[19] P.L. 105-220, Title IV, §508(b), codified at 29 U.S.C. §794(d),
[20] P.L. No. 104-104, codified at 47 U.S.C. §255.

specific sections of Part 68 that address volume control and hearing aid compatibility.[21] Similarly, the Commission should now recognize that regulatory action is necessary to ensure the availability of accessible products and services as our communications networks become Internet-based.

VI. The FCC has Authority to Regulate Disability Access to IP-Enabled Services.

Both the FCC's universal service obligation and its ancillary jurisdiction under Title I of the Communications Act provide the Commission with ample authority to require disability access to IP-enabled services.

A. The Universal Service Obligation Requires the Commission to Ensure IP Access by People with Disabilities

Title I of the Communications Act directs the Commission to "make available, so far as possible to all the people of the United States . . . a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges . . . "[22] Prior to the 1996 Telecommunications Act, it was this general universal service obligation that formed the basis for nearly all of the federal laws requiring telecommunications access by people with disabilities. Specifically, beginning with the Telecommunications for the Disabled Act of 1982, Congress used the universal service doctrine as justification for directing the FCC to take steps that would insure the inclusion of people with disabilities in our nation's developing telecommunications networks. In that Act, Congress concluded that denying people with disabilities access to

[21] *In the Matter of 2000 Biennial Regulatory Review of Part 68 of the Commission's Rules and Regulations*, Report and Order, CC Docket No. 99-216, FCC 00-400 (Nov. 9, 2000) at ¶66.
[22] 47 U.S.C. §151.

telephone services "would disserve the statutory goal of universal service [and] deprive many individuals of the opportunity to have gainful employment."[23]

Similarly, when Congress enacted the Hearing Aid Compatibility Act, it explained that "[u]niversal compatibility and equal access by the hearing impaired to the telephone network follow from the [universal service provision of the] Communications Act of 1934. . . Advances in technology have made communication possible and it is time that hearing impaired persons are include in 'all the people'"[24] The Telecommunications Accessibility Enhancement Act's mandate for federal relay services and the ADA's mandate for nationwide relay services followed this pattern, going so far as to codify into the statutory language of the relay mandates themselves, the universal service obligation:

> In order to carry out the purposes established under section 1, to make available to all individuals in the United States a rapid, efficient nationwide communication service, and to increase the utility of the telephone systems of the Nation, the Commission shall ensure that interstate, and intrastate telecommunications relay services are available, to the extent possible . . ."[25]

The above laws firmly establish the Commission's ability to use its universal service obligation to require disability access to IP-enabled services. Not to assert this authority would seem inconsistent with the past two decades of legislative efforts to guarantee communications access to all Americans with disabilities.

B. Ancillary Jurisdiction is Another Avenue to Assert Authority over Disability Issues

As an alternative to reliance on its universal service obligation, the FCC can assert ancillary jurisdiction to mandate disability access to IP-enabled services.[26] As the Commission notes, it is permitted to assert this jurisdiction where needed to fulfill an

[23] H. Rep. No. 888, 97th Congress, 2d Sess at 3-4.
[24] H. Rep No. 674, 100th Cong., 2d Sess. at 6.
[25] 47 USC § 225(b)(1).
[26] NPRM at ¶46.

"express statutory obligation."[27] Here that express statutory obligation – to safeguard the accessibility needs of people with disabilities to IP-enabled services – is evidenced by Section 255 and the plethora of federal disability laws that have preceded it. It is without a doubt that Congress both anticipated and expected the Commission to assume an active role in efforts to bring advanced communication technologies to Americans with disabilities. To assert ancillary jurisdiction over IP-enabled services for the purpose of furthering this objective would be in keeping with this string of federal statutes. It would also be in keeping with the Commission's own Section 255 rules. Although the statutory language of Section 255 is limited to telecommunications services, the Commission used its ancillary jurisdiction to extend Section 255's protections to both interactive voice response systems and voice mail because of the critical impact that access to both of these services would have on the ability of people with disabilities to access the telecommunications services covered by Section 255.[28]

CSD calls upon the FCC to rely on one of the above legal theories to mandate adequate safeguards to IP-enabled services by people with hearing disabilities. Without those mandates, the FCC runs the risk of potentially eradicating the many gains that have resulted from telecommunications access – increased independence, access to employment, and emergency access – that Congress worked so hard to secure over the past two decades.

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[27] *Id.*

[28] *In the Matter of Implementation of Sections 255 and 251(a)(2) of the Communications Act of 1934, as enacted by the Telecommunications Act of 1996, Access to Telecommunications Service, Telecommunications Equipment and Customer Premises Equipment by Persons with Disabilities*, Report and Order and Further Notice of Inquiry at ¶46, WT Dkt No. 96-198, FCC 99-181 (rel. Sept 29, 1999).

VII. Conclusion

Over the past two decades, people with hearing disabilities have finally begun to enjoy many of the benefits offered by our nation's telecommunications services. These hard-fought gains, however, will be lost if the needs of these individuals are not safeguarded as our nation's communication services migrate to VoIP and other IP-enabled technologies. While these technologies in themselves offer significant promise to Americans with disabilities, the flexibility and enhancements that they offer will be of limited value to these populations if IP-enabled services are not designed to be accessible.

Accessibility measures are likely to be more achievable if they are incorporated now, while IP-enabled services are being designed and developed, rather than later, when expensive and burdensome retrofits will be necessary. To this end, the Commission should take this opportunity to issue mandates that facilitate the availability and accessibility of IP-enabled services for Americans with disabilities. In addition, as traditional telephone services migrate to IP platforms, the Commission should ensure that providers of these new services are both obligated to pay into funds that support our nation's telecommunications relay service programs, and required to ensure the interoperability of their products and services.

Respectfully submitted,

/s/

Ben Soukup, CEO
Communication Service for the Deaf
102 North Krohn Place
Sioux Falls, SD 57103
605-367-5760

Karen Peltz Strauss

By: Karen Peltz Strauss
KPS Consulting
2120 L Street, NW
Suite 400
Washington, D.C. 20037
202-478-6148
kpsconsulting@starpower.net

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